

## Gopher Tortoise Management Procedure

The KSC Gopher Tortoise Management Procedure is as follows:

The Biomedical Office will be responsible for the location and marking of active tortoise burrows. On larger projects, or in densely vegetated areas, SGS personnel may be called upon to assist in this task. The Biomedical Office will also be called upon to recommend relocation sites based upon GIS analysis.

FWS will be responsible for all tortoise relocations, regardless of whether the site is within the Refuge or in NASA operational areas. FWS will maintain a current relocation permit with the State of Florida. Minor relocations

(1 or 2 individual tortoises) will be handled as part of everyday operations at the Refuge. Relocations of larger populations, or rushed relocations (less than 1 month notice), will be handled on a case-by-case basis with regard to schedule and cost. That is, the project or program will bear the costs incurred by the Refuge and the Biomedical Office. Because of State concerns regarding the spread of a highly contagious respiratory infection that can be fatal to tortoises, these guidelines proposed by the Florida Game & Fresh Water Fish Commission (FGFWFC) will be followed:

No tortoises showing symptoms of the disease may be relocated under any circumstances. If the relocation site is within a three-mile radius of the site being impacted, the relocation can proceed after appropriate permits have been obtained. If the relocation site is more than three miles from the site being impacted, the following criteria apply:

Each tortoise must have a completed Health Evaluation form. Standard forms will be provided by FGFWFC. Specialized training from FGFWFC will be required for personnel responsible for drawing and handling the blood to be tested. Reliable results depend upon proper handling, storage and shipping of the samples.

Samples will be shipped to the University of Florida, School of Veterinary Medicine, which will do the actual testing. If less than five (5) tortoises are being relocated, all must be tested for the disease; if five (5) to ten (10) are being relocated, at least five (5) must be tested; if more than ten (10) are being relocated, at least 25% (or a maximum of 25), of the tortoises must be tested.

A tortoise can test positive for the disease without exhibiting symptoms (i.e. a carrier). If less than 50% of the tortoises test positive, the asymptomatic tortoises may then be relocated. If greater than 50% test positive, there can be no relocation of any of the tortoises.

**Note:** If the aforementioned testing is required to conduct a tortoise relocation effort, the project or program will bear the costs incurred. If relocation cannot take place, there are several options that may be considered:

- Relocation to sites within the referenced 3-mile radius of the site being impacted, after receipt of the appropriate permits;
- Application for "Take" permit, with mitigation occurring on KSC;
- Buying credits in a mitigation bank off-site. (Off-site mitigation will occur rarely, if ever, and must involve extraordinary circumstances.)